

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) Apparatus for processing an ECG signal, the apparatus comprising:

a transmitter having an input for receiving the signal and a processor which separates the signal into first and second signal components, manipulates the first signal component to determine the temporal spacing between consecutive R-peaks in the QRS complex of the signal, and in which the second signal component consists of the ECG signal; and

a receiver;

in which the transmitter transmits both the manipulated first signal component and the second signal component to the receiver.

2. (original) Apparatus as claimed in claim 2 in which the processor comprises an amplifier which amplifies the ECG signal prior to separation into first and second signal components.

3. (currently amended) Apparatus as claimed in claim 1 ~~or claim 2~~ in which the processor further comprises first and second signal filters which separate the electrocardiograph signal into the first and second signal components.

4. (original) Apparatus as claimed in claim 3 in which the first signal filter includes a high-pass filter.

5. (original) Apparatus as claimed in claim 4 in which the output from the high-pass filter is fed into a low-pass filter.

6. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 1 in which the processor includes a micro-controller which receives the first and second signal components and converts at least the first signal component to a digital signal prior to manipulation to determine the R-R time intervals.

7. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 1 in which the first and second signal components are fed into a data stream for transmission to the receiver.

8. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 1 in which the processor samples the first signal component between 500 Hz and 2000 Hz.

9. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 1 in which the processor samples the first signal component at approximately 1000Hz.

10. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 1 in which the processor samples the second signal component at approximately 500 Hz.

11. (original) A method for processing an ECG signal, the method comprising the steps of:

receiving the signal at an input of a transmitter, the transmitter having a processor which separates the signal into first and second signal components, and manipulates the first signal component to determine the temporal spacing between consecutive R-peaks in the QRS complex of the signal, and in which the second signal component consists of the ECG signal; and

transmitting both the manipulated first signal component and the second signal component to a receiver.

12. (original) A method as claimed in claim 11 further comprising the step of amplifying the ECG signal prior to separation into first and second signal components.

13. (currently amended) A method as claimed in claim 11 ~~or claim 12~~ further comprising the step of separating the ECG signal into the first and second signal components using first and second signal filters.

14. (original) A method as claimed in claim 13 which includes the step of filtering the first signal component using a high-pass filter.

15. (original) A method as claimed in claim 14 comprising the step of feeding the output from the high-pass filter into a low-pass filter.

16. (currently amended) A method as claimed in ~~any preceding~~ claim 11 comprising the steps of:

providing a micro-controller in the processor;

receiving the first and second signal components in the micro-controller; and

converting at least the first signal component to a digital signal prior to manipulation to determine the R-R time intervals.

17. (currently amended) A method as claimed in ~~any preceding~~ claim 11 comprising the step of feeding the first and second signal components into a data stream for transmission to the receiver.

18. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 11 comprising the step of sampling first signal component between 500 Hz and 2000 Hz.

19. (currently amended) Apparatus as claimed in ~~any preceding~~ claim 11 comprising the step of sampling the first signal component at approximately 1000Hz.

20. (currently amended) A method as claimed in ~~any preceding~~ claim 11 comprising the step of sampling the second signal component at approximately 500 Hz.

21. (cancelled)

22. (cancelled)